

# CERAMIC SMD CRYSTAL



5.0 X 3.2 X 1.1mm

ABM3B



RoHS  
Compliant

## FEATURES:

- Fundamental mode.
- Suitable for reflow.
- Tight Stability available.
- Ceramic package and metal lid assures high precision and reliability.
- Seam sealing.

## APPLICATIONS:

- Cellular telephones, Pagers.
- Communication and Test equipment.
- High Density applications.
- PCMCIA and wireless applications.

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N	ABM3B Series
Frequency Range	8.0 MHz - 60.0 MHz (61 MHz - 125 MHz : Contact ABRACON for assistance)
Operation Mode	Fundamental
Operating Temperature	- 10°C to + 60°C (see options)
Storage Temperature	- 40°C to + 85°C
Frequency Tolerance @ 25°C	± 50 ppm max. (see options)
Frequency Stability over the Operating Temperature (Ref to + 25°C)	± 50 ppm max. (see options)
Equivalent Series Resistance	See table 1
Shunt Capacitance C0	7 pF max.
Load Capacitance CL	18 pF (see options)
Drive Level	100 µW max., 10 µW typical
Aging (First Year) @ 25°C ± 3°C	± 5ppm max.
Insulation Resistance	500 MΩ min at 100Vdc ± 15 V

TABLE 1 - Standard ESR

FREQ (MHz)	ESR (Ω)max.
8.0 - 9.999	200
10.0 - 11.999	100
12.0 - 15.999	70
16.000 - 60.000	50

## OPTIONS AND PART IDENTIFICATION:

ABM3B□ - Frequency - □ - R□□□ - □ - □ - □ - □

Height (mm)	
Blank	1.1mm max
1	0.8mm max

Load Capacitance (pF)	
6 to 32	

Contact ABRACON for CL values outside standard range.

ESR	
RXXX	

Operating Temp.	
E	0°C to +70°C
B	-20°C to +70°C
C	-30°C to +70°C
N	-30°C to +85°C
D	-40°C to +85°C
*	-40°C to +105°C
*	-55°C to +125°C

\*Contact ABRACON for assistance.

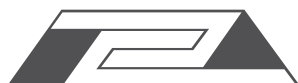
Freq. Tolerance	
1	± 10 ppm
7	± 15 ppm
2	± 20 ppm
3	± 25 ppm
4	± 30 ppm

\*Contact ABRACON for tolerances not listed.

Freq. Stability	
U	± 10 ppm (*)
G	± 15 ppm (*)
X	± 20 ppm
W	± 25 ppm
Y	± 30 ppm
H	± 35 ppm
Z	± 100 ppm (#)

\*Contact ABRACON for tighter freq. stability.  
(#) For extended temperatures

Packaging	
Blank	Bulk
T	Tape and Reel



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## OUTLINE DRAWING:

Please see Table 2 below for height and chamfer information.



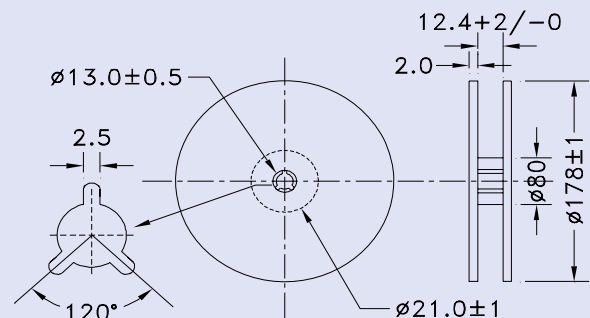
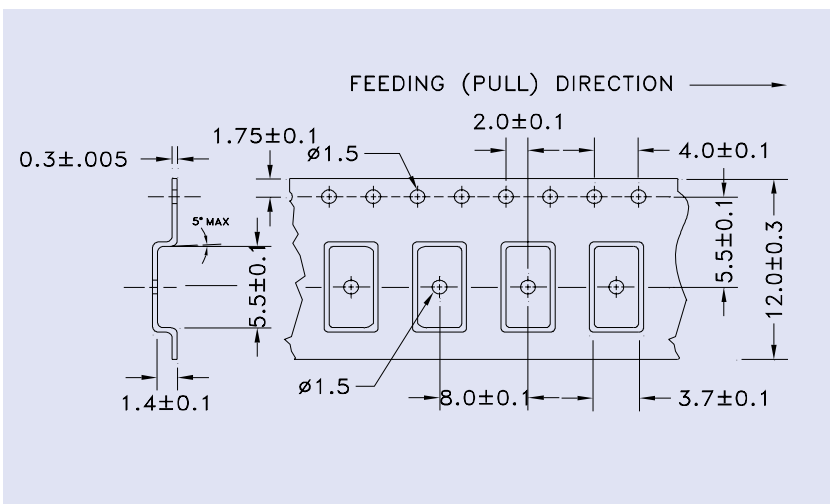
Dimensions: inch (mm)

**Note:** Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 4. Be advised that this does not affect the electrical characteristics of the crystal in any way.

Table 2

	Height (mm)	Chamfer PIN #
ABM3B	1.1mm max	#1 (Default), #4 (See Note)
ABM3B1	0.8mm max	#1 (Default), #4 (See Note)

## TAPE & REEL:



Dimensions: mm